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Journal of Moral Philosophy Vol.2.3:
317-332

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Thomas Pogge's Global Resources Dividend: a critique and an alternative

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* I am most grateful to Thomas Pogge for constructive criticism of an earlier draft, as well as to my colleague Lynn Dobson and an anonymous referee.

Abstract

Pogge's proposal for a Global Resources Dividend (GRD) has been criticised because its likely effects would be less predictable than Pogge supposes and could even be counterproductive to the main aim of relieving poverty. The GRD might also achieve little with respect to its secondary aim of promoting environmental protection. This article traces the problems to Pogge's inadequate conception of natural resources. It proposes instead to conceive of natural resources in terms of 'ecological space'. Using this conception, redistributive principles follow with a more definite logic from Pogge's own supporting moral argument. The proposed alternative approach also promises a more direct contribution to Pogge's secondary aim of resource conservation and environmental protection. I conclude that if any redistributive resource-based tax should be levied on nations, then there are at least four decisive reasons to favour levying a tax related to a nation's per capita utilisation of ecological space rather than the GRD.

Thomas Pogge's Global Resources Dividend: a critique and an alternative

Thomas Pogge's writings on global justice have attracted a good deal of attention in recent years. Pogge has developed powerful moral arguments in favour of global redistribution of wealth, and these are not called into question in the present article. The focus of attention here is the Global Resources Dividend (GRD) which he has proposed as a practical step towards the requisite redistribution. Pogge does not claim this is the only redistributive mechanism that could be derived from the moral argument, and certainly does not think it is the most the argument could justify - hence his characterisation of it as a 'modest' proposal. But he does see it as a valuable first step, and one which also promises, as a secondary benefit, to help curb environmental pollution and the depletion of natural resources.

The problem I address in this article, after briefly describing the basic features of the GRD, is that, as others have already suggested, if implemented, the GRD's likely effects would at best be rather less predictable than Pogge supposes and at worst could actually be counterproductive to his main aim. For related reasons the GRD would also do little with respect to the secondary aim. My consideration of these criticisms in section 2 finds them, unfortunately, to be well-founded.

In section 3 I trace the problems with the GRD proposal to the insufficiently thought out conception of natural resources that underpins it. I suggest that the arbitrariness of the GRD's likely effects is due to elements of arbitrariness in Pogge's conception of natural resources. A less arbitrary conception, I argue, is one which conceives natural resources in terms of 'ecological space'. In briefly explaining this idea, I show how it can support redistributive principles that follow with a more definite logic from Pogge's own moral justification for redistribution. Moreover, as well as linking the rectification of radical inequalities more directly and robustly to the question of command of natural resources, the proposed alternative approach also promises a more direct contribution to Pogge's secondary aim of resource conservation and environmental protection. In section 4 I respond to an anticipated objection regarding the normative basis of my argument, and in doing so expose a new question about Pogge's justificatory argument for the GRD. I conclude that if any redistributive resource-based tax should be levied on nations, then there are at least four decisive reasons to favour levying a tax related to a nation's per capita utilisation of

ecological space rather than the GRD.

1. Pogge's proposal

The GRD is a proposal Pogge has sketched and defended in several publications over a number of years.¹ What it envisages, in brief, is that 'states and their governments shall not have full libertarian property rights with respect to the natural resources in their territory, but can be required to share a small part of the value of any resources they decide to use or sell.'² Having initially called it a tax, he has come to refer to the payment they must make as a dividend 'because it is based on the idea that the global poor own an inalienable stake in all limited resources. As in the case of preferred stock, this stake confers no right to participate in decisions about whether or how natural resources are to be used and so does not interfere with national control over resources, or eminent domain. But it does entitle its holders to a share of the economic value of the resource in question, if indeed the decision is to use it.'³ Proceeds from the GRD are to be used in the relief of the worst extremes of global poverty, with the aim of ensuring that all human beings can meet their own basic needs with dignity. Pogge does not believe that an impossibly large amount would need to be raised, and speaks of an initial maximal figure of 1 percent of aggregate global income.⁴ Such a sum could be raised, he argues, by targeting a small range of selectively chosen resources.

The GRD is thus commended by Pogge as a practical solution to a practical problem. That the problem needs to be addressed is a matter of morality. Because the solution is one that requires institutional adoption, he further insists that the morality in question is not simply that of individual conscience; moreover, because the solution would require enforcement, he also argues that it should be adopted not simply on the grounds of charity but of justice. The basic 'positive' obligation on affluent individuals and nations to assist the victims of radical inequality, he believes, would be hard to deny by anyone; but what he seeks further to establish is that radical inequality manifests 'an injustice that involves violation of a negative duty by the better-off.'⁵ This involves showing that the better-off are engaged in institutionalised practices that are at least in part responsible for radical inequalities and so have a negative duty to refrain from those practices, or at least to compensate for their effects. Pogge thus posits causal connections between the wealth of the better-off and the poverty of the worse-off. These are of three main kinds:⁶ the effects of a

shared institutional order, which is controlled largely by the developed countries in virtue of their vastly superior military and economic strength; the continuing effects of ‘a common and violent history’ which has involved colonial plunder and enslavement; and the uncompensated exclusion of the poor from the use of natural resources. It is this last source of injustice that Pogge focuses on in his argument for a GRD. The other two, he notes, would support almost any reform that would improve the circumstances of the global poor. His narrowing of focus yields a more specific idea: ‘those who make more extensive use of our planet’s resources should compensate those who, involuntarily, use very little.’⁷

2. Criticisms of the GRD proposal

In this section I consider criticisms of the GRD on the grounds that, were it implemented, its effects would be arbitrary in some significant ways, and so it would not necessarily achieve the ends which provide its rationale since. Those ends themselves, and the moral argument that presents them as demands of justice, are not called into question here.

A major element of arbitrariness in the proposal concerns its likely distributive effects. As Joseph Heath, for instance, has argued, these could be expected to be at best random, and at worst regressive, thus actually disfavours some of those - the poorest - whom it is intended to assist. The distributive effects would be random because even if the proceeds of the dividend go to the poor, it is levied on the extraction of primary resources whose territorial distribution includes both some rich and some poor nations. More crucially, in taxing the immediate products of primary extraction, it falls most heavily on those nations dependent on such activities rather than upon those with more capital-intensive production techniques. This means, in practice, it could tend to fall on the poorer rather than the richer nations. Recognising this, Pogge’s response is that the cost would be passed on to richer nations in the form of higher commodity prices. Heath bluntly objects that Pogge ‘forgets that it will be passed right back to poorer nations, in the form of higher prices for manufactured goods, which is what those commodities are exchanged for.’⁸ Although Pogge in fact does not disregard this problem, he can nonetheless only suggest considerations that will ‘mitigate’ the regressive effect,⁹ and even these cannot be established with any certainty. For as Dirk Haubrich carefully analyses, there are many economic variables - such as demand elasticity and ‘rippling through’ effects - which are involved in determining where the burden

of such a tax would fall.¹⁰ Pogge does recognise that applying the GRD to certain kinds of resources would quite foreseeably harm the poor directly. He accordingly says that the GRD should apply not to the cultivation of basic commodities such as grain, beans or cotton, for instance, but rather, when it is land use at issue, to raising cattle or growing crops such as tobacco, coffee, cocoa or flowers.¹¹ But such ad hoc qualifications could be seen as compounding rather than alleviating the arbitrariness of the proposal. If poor people are under economic pressure to switch from producing food crops to cash crops this would not be relieved simply by squeezing profit margins on the latter too.

The arbitrariness may also extend to the quantification of the proposed tax. I do not refer simply to the open question about the rate at which it should be set, but more fundamentally to the question of identifying the relevant sum of economic value of any given resource that the tax would be applied to. There is a practical dimension to this issue, which is worth spelling out on the way to highlighting a question of more critical normative significance. In practice, even the most rudimentary forms of primary production entail a number of processes in bringing a raw material, crop, or energy source into a usable and marketable state. At which point of which process should the tax be applied? Which kinds of costs associated with the processes (from initial prospecting, through securing finance, providing capital or agricultural infrastructure, the various processes of physical extraction, the preparation for physically transferring them, and passing them through merchants for presentation on the world market) would be allowable against the tax and at what rate? Obviously such questions cannot be addressed *a priori* or in the abstract, since for any given resource in any particular context of its extraction, the range of reasonable answers will vary. Pogge's proposal aims to circumvent all such difficulties with the stipulation that the GRD should 'be based on resources and pollutants whose extraction or discharge is easy to monitor or estimate'.¹² If we grant that such monitoring and estimating may be possible for some resources, and that the national governments responsible for collecting the tax can deal with the ingenuity of tax avoiders, there remains a certain arbitrariness in taxing the resources that can easily be taxed rather than those which reasons of justice or environmental concern suggest should be taxed. The case of oil appears, in this as in other respects, to be a favourable one for Pogge's proposal, given its association with both wealth creation and environmental pollution, and it is no coincidence that most of his illustrative remarks assume the case of oil. It is also relatively clear what a GRD on oil would be proportional to: given

the cartelized system of oil production, there is effectively a unitary world price that pertains to a given quantity and quality of crude oil. So the GRD could be proportional to this price. Such standardisation of production and pricing does not apply to other resources, however. And the question why the tax should be applied at the point of extraction, or even at the point of exportation, rather than elsewhere remains to be answered.

This brings me to what I think is a crucial question whatever resource is at issue: this is the question of the justification for imposing the tax on a once only basis at the point of extraction. (There is an arbitrariness about this that I shall further expose and diagnose in the next section.) If a tax on natural resources is to have progressive redistributive effects, there is a case for suggesting it should be levied on those who ultimately derive more economic benefit from the exploitation of raw resources rather than on those who, engaged in primary extraction, will generally yield the least added value from the resource. As Heath observes, under the GRD ‘the “value-added” by the wealthy nations would be almost entirely untaxed, because their production is more capital-intensive.’¹³ And I’d note that raw materials extracted have a very low economic value compared to finished products, so why levy a tax on a relatively small component of value? This leaves those most dependent on raw material exports liable to taxes while the industrialised rich are much more marginally affected, even though their command of resources (calculated fully in terms of ecological space, as I shall discuss in the next section) is much greater.

Another element of arbitrariness concerns the secondary rationale for the GRD, namely, that a tax on natural resources will generally tend to favour their conservation and that a tax on resources such as petroleum more particularly will work in favour of environmental protection. Pogge thinks the GRD will have *considerable benefits* for protection and conservation,¹⁴ but this seems doubtful.¹⁵ A marginal tax on the activities is more likely to have a marginal impact on them, assuming demand is not completely elastic. Moreover, since the primary aim of the tax is to generate revenues from which the poor might benefit, in order that they too can make use of the resources from which they are currently, in Pogge’s own words, *involuntarily* excluded, the secondary aim could in fact be annulled by it. In short, one cannot have it both ways. The only effects one can anticipate with reasonable assuredness would be that the economic costs of polluting or depleting resources would be subject to marginal redistribution, not that pollution or resource depletion would be diminished (even marginally).

It has therefore to be concluded that the GRD should not necessarily be expected efficaciously to achieve its ends,¹⁶ either the primary one of effecting progressive economic redistribution or the incidental one of environmental protection and resource conservation. In order to try to get it to achieve at least its primary end, it is arguable that in its implementation the GRD would have to be so tweaked as to conform more to the principle ‘tax the rich and redistribute to the poor’ than that of compensation for the latter’s exclusion from access to natural resources, which is the moral argument Pogge invokes in support of the proposal. Thus critics like Heath maintain the further conclusion that it is profoundly arbitrary to relate global redistributive taxes to natural resources at all. In the next section I show why this further conclusion can, however, be firmly resisted.

3. Reconceptualising natural resources and the justice of their distribution

In what follows I sketch a perspective from which the problems noted can be diagnosed as arising from what can be seen as a flaw in the conceptual framing of the GRD proposal. Revealing this flaw leads to the suggestion of an alternative type of proposal for achieving the ends the GRD aims at.

I would note, to begin with, that this flaw is not the one that Heath has claimed to identify. In his view, ‘[t]he underlying fallacy lies in thinking that wealthy nations are wealthy because they consume so many resources.’ Heath claims, contrariwise, that it is because they are wealthy that they consume so much. Explaining the problem with Pogge’s view will be at the same time to explain the problem with this one.

The point of departure for this explanation, though, is one where I have expressed agreement with Heath. As noted, it is arbitrary to focus on primary extraction from an economic point of view, given that greater wealth is generated at subsequent stages of the productive process. The next step, though, is to recognise that wealth itself represents the command of resources, and thus to emphasise that there is further arbitrariness in supposing that only at the point of extraction does the economy have to do with natural resources. For natural resources are not ‘used up’ in their extraction; nor do they disappear at any point in the processes of production, exchange and consumption; they are certainly not destroyed, as Pogge implies.¹⁷ What actually happens is that their form and composition change. The physical and energetic constituents of raw materials and fuels continue to be embodied in the

products manufactured from them; the constituents that are not embodied in the products are also not destroyed but rather contribute to changes in the environment - changes which can also be conceived in terms of utilisation of the environment itself as a resource in providing absorption services. Thus those who valorise resources, even in increasingly 'refined' forms, are all the time drawing benefits from natural resources in one state or another which are under their command. From this perspective, then, I would note that Heath's question of whether consumption causes wealth or wealth causes consumption appears misposed: wealth and consumption are not two discrete phenomena that have some sort of serial causal linkage one way or the other. Wealth just *is* the command of resources, all of which in the final analysis are natural resources. The 'productive consumption' of resources produces wealth; wealth itself represents the command of resources which can be consumed, 'productively' or otherwise.

It is important also to accept that while enjoying the benefits of 'consuming' resources, productively or otherwise, one is simultaneously creating disbenefits in the form of environmental pollution. The negative environmental impacts of productive processes should not be abstracted from broader issues concerning the effective command of natural resources. Conceptually it would be artificial, and practically it would be inappropriate, to consider 'environmental bads' and 'environmental goods' as entirely separate sets of phenomena. There is just one biophysical reality to which the various categorisations of environmental goods and bads relate. To put the point, which derives from basic principles of physics, in homespun terms: "everything goes somewhere".

This general perspective I am proposing is most vividly captured with the concept of 'ecological space'.¹⁸ Systematic attempts in recent years to account for the biophysical basis and impacts of human economic activity have led to the development of converging methodologies to determine the total amount of biologically productive land and water area required to produce the resources consumed and to assimilate the wastes generated using prevailing technology. This aggregated amount is referred to as 'ecological space'; and the use or 'occupation' of an amount of it is referred to as an 'ecological footprint'.¹⁹ Ecological footprint accounts express in 'global hectares' the amount of biologically productive space with 'world average productivity' which is necessary to maintain the current material throughput of the human economy under current management and production practices. The footprint is not made on a continuous piece of land; it corresponds to the aggregate land and

water area in various ecosystem categories that is drawn on by that nation. Wherever the particular resources it utilises may have originated, their production required amounts of ecological space. So in the total ecological space a nation's economy disposes of, its own territorial endowment may figure as a greater or smaller proportion. The ecological footprint of a nation measures its total resource consumption by adding imports to, and subtracting exports from, its domestic production.

Whatever operational difficulties and debates about value assumptions may be involved in actually supplying such accounts, the methodology of calculating ecological footprints is sufficiently refined at least to make meaningful comparisons between nations. Such accounts in fact depict a pattern of distribution which does have significant correlations with the distribution of economic wealth.²⁰ They thus tend to confirm, more decisively than Pogge's conceptual framework allows one to recognise, that a country's wealth indeed depends on its command of natural resources, providing that we take a *full* account of the resources at its disposition and not only of those which happen to be its natural territorial allotment.

Taking this perspective thus enables us not only to endorse, but also to help explain the basis of, Pogge's claim that 'the better-off enjoy significant advantages in the use of a single natural resource base from whose benefits the worse-off are largely, and without compensation, excluded'. The mistake of supposing that these advantages arise in any direct way from utilising the natural resources found on a particular territory²¹ is avoided by conceiving of resources in terms of ecological space. Pogge's statement correctly refers to the *benefits* the rich derive from the single global natural resource base. Territorial possession of a part of that base is not necessary to yield the benefits in question.

Adopting this perspective on natural resources also allows us to forge a clearer and more robust link between redistributive proposals and their normative underpinnings than Pogge has been able to establish for the GRD. Regarding the normative foundations of his argument, Pogge has claimed that the GRD 'operates as a modern Lockean proviso.'²² Yet he also says it 'differs from Locke's own proviso by giving up the vague and unwieldy condition of "leaving enough and as good for others".'²³ However, the proviso need not be vague or unwieldy if applied to the appropriation of ecological space, I shall argue, and ought not to be given up, but, on the contrary, insisted upon. On Pogge's modified conception of

the proviso, the difference, he says, is that one may use unlimited amounts, but one must share 'some of the economic benefit.'²⁴ Yet it is a material impossibility for inequalities to grow indefinitely and still yield gains for the worst off. This is because economic growth (as distinct from inflation) does in the aggregate represent increased use of natural resources. The depletion of available resources can wipe out the gains of the worst off - those who have traded away their resources - before it seriously affects the richer who are still working with the gains accruing as a result of the compound advantages they enjoy over the poor. Accordingly I want to argue that the original Lockean proviso should be preserved in a contemporary recontextualisation.²⁵

The utilisation of ecological space can and should be conceived of as the ongoing initial appropriation of nature by humans. The idea of initial appropriation may conjure images of direct physical interaction with a parcel of territory, but there is no particularistic territorial reference for the concept of ecological space other than the planet earth as a whole; physical interaction with the natural world continues to occur not only in prospecting and cultivating, but also through the production, pollution, use and disposal of all physical products - and even as they change hands through trade. The initial appropriation of natural resources is precisely what ecological footprint accounts track. The utilisation of an amount of ecological space by any particular party would accordingly be just if, adapting the Lockean proviso, 'as much and as good' ecological space remains to be utilised by all other parties. But since any given amount of ecological space is as a point of methodological principle 'as good' as any other equal amount, then the proviso would require that *as much* ecological space remain for utilisation by others.

When ecological space utilisation is conceived as initial appropriation, therefore, the only inequalities that are justified are those achieved by a more efficient extraction of benefits from one's equal share of ecological space. It is worth emphasising that there is a difference between allowing efficiency gains from an equal share of a single resource base and justifying inequalities in the share of the resource base itself. Thus the concept of efficiency, as related to the use of ecological space, has a narrowly defined meaning: it refers to the economic gains that can be achieved from the more productive use of a given amount of ecological space. Such inequalities would tend to be localised, temporary and marginal. The vast and systematic inequalities globally which Pogge depicts could not be justified at all on the revised understanding of the Lockean proviso I have sketched. At this point it

therefore seems appropriate to suggest that a global tax proportional to a nation's per capita utilisation of ecological space would answer to the demands of Pogge's moral argument more thoroughly and less arbitrarily than the GRD.²⁶

This brings me, finally, to remark that the potential effects of Pogge's GRD may in fact be even more modest than he supposes. In explaining why he thinks even a very modest GRD may have significant effects Pogge refers to the difference between longer term compound inequalities and 'ordinary centrifugal tendencies of market systems'. 'Present radical inequality',²⁷ he observes, 'is the cumulative result of decades and centuries in which the more affluent societies and groups have used their advantages in capital and knowledge to expand these advantages further.'²⁸ He appears to believe, however, that if the worst effects of uneven historical accumulation could be assuaged then even quite a small GRD 'may, in the context of a fair and open global market system, be sufficient continuously to balance those ordinary centrifugal tendencies in markets enough to forestall its reemergence.'²⁹ Yet I believe this claim may seriously underestimate the continuing relevance of the longer-term compound advantages with which the ordinary centrifugal tendencies are contrasted. In a world of finite resources, indefinite economic growth is not possible. A 'fair and open global market system' can only facilitate the transfer of the resources that exist, not produce more, except perhaps at the margin. There is reason to think that accumulated advantages in terms of capital wealth may simply be amplified by a market system, even a 'fair' one. Cumulative historical advantages can be seen as the basis for continued systematic advantages that might more than offset the countervailing contribution of a GRD. Here I would refer to the account offered by Alf Hornborg of how natural resource inequalities and economic inequalities are mutually reinforcing in a cumulative and systematic fashion. Taking the biophysical perspective which I have already commended, Hornborg argues that global patterns of trade can be viewed as revealing a prevalent occurrence of an 'unequal exchange of resources'. This is made visible 'by identifying, beneath the flows of monetary exchange value, uneven flows of real resources such as energy, labour time, and hectares of land productivity.'³⁰ A key point is that from the biophysical perspective, finished products represent an increase in entropy and material disorder compared to the resources from which they were produced, even though from an economic view they have a greater value as represented by price. Accordingly, if we take a longitudinal view of the transformation of a given set of natural resources - fuels and raw materials - into an industrial product, we find a negative correlation

between, on the one hand, the amount of negative entropy and usable material embodied in a product and, on the other, its price. Hornborg spells out the socio-economic consequences of this negative correlation: ‘industrial centers exporting high-utility commodities will automatically gain access to ever greater amounts of available energy from their hinterlands. The more energy they have dissipated today, the more “new” energy they will be able to buy—and dissipate—tomorrow.’³¹ This process has clear distributive implications inasmuch as industrialism implies a *social* transfer of entropy, and of usable materials. It is because of the social transfer of entropy and material, according to Hornborg, that world trade can be regarded as exploitative - of the poor by the rich - in relation to natural resources. As pressures on natural resources increase, so too one would expect the ‘ordinary centrifugal tendencies’ inherent in the global market system to intensify rather than be held in check. So to suppose that a ‘fair’ market system superimposed on a situation of dramatic and systematic inequalities with respect to the command of resources would prevent the further intensification of deprivation and exploitation of the world’s poor is, I believe, mistaken.

My main criticisms of the GRD, though, are made not on account of its being a modest step in the right direction, but on account of doubts as to whether it is unequivocally a step in the *right* direction at all.

4. Some remarks on the moral argument

In this article I am not attempting to present a fully-fledged alternative proposal so much as to suggest the basis for one. Nonetheless, as I am also claiming that its basis is more firmly rooted in Pogge’s own moral argument than is his GRD, a comment is in order on the potential objection that the approach I commend in fact somewhat shifts its moorings away from the specific moral argument Pogge deploys in support of the GRD proposal.

Of the three possible approaches Pogge identifies as supporting a principle of global redistribution, the one he actually uses is arguably the least controversial in terms of its basic premises. This approach centres on the claim that ‘the better-off enjoy significant advantages in the use of a single natural resource base from whose benefits the worse-off are largely, and without compensation, excluded.’³² It can be said to appeal to the idea that the territorial distribution of natural resources on our globe is a consequence of brute luck and thus morally arbitrary; disadvantages arising from these morally arbitrary circumstances are therefore not ‘deserved’, and justice requires that they be rectified.³³ Now because my proposal does not

confine attention to raw natural resources as they are found lying in, on or above the ground, it could be said to forego the basic advantage of being able to appeal to such a clear distinction between ‘deserved’ and ‘undeserved’ benefits, and thus have less compelling normative force than Pogge’s does by preserving that distinction. In response,³⁴ I shall say first why I do not think that Pogge’s position is actually so distinct on this score from the one I advocate, and then why the available normative force is anyway not diluted for my proposal.

To begin with, then, I question whether Pogge’s moral argument avails itself of the pure moral force of the ‘undeserved’ character of natural resources. When setting out his GRD proposal, Pogge mentions three distinct approaches to justifying global redistribution as a matter of justice. In his argument for the GRD he makes explicit appeal to just the one approach that centres on the injustice of uncompensated exclusion with regard to natural resources. The other two approaches, which he sets aside, focus respectively on the ‘effects of shared institutions’ and ‘effects of a common and violent history’. According to the former, ‘there is a shared institutional order that is shaped by the better-off and imposed on the worse-off’ which ‘is implicated in the reproduction of radical inequality’.³⁵ According to the latter, ‘[t]he social starting positions of the worse-off and the better-off have emerged from a single historical process that was pervaded by massive, grievous wrongs’.³⁶

I draw attention to these other two approaches in order first to acknowledge the possible objection to my own proposal that it trades on these in order to account for the recurrent and historical ‘ecological debt’ which I claim should be repaid, and so dilutes the clear moral force of the approach Pogge actually appeals to. My other, more immediate, reason for highlighting them is that I wish to claim the three approaches are not quite so separable as Pogge suggests. In fact, I do not think the ‘uncompensated exclusion’ approach is simultaneously distinct and complete at all. For Pogge’s purposes, it has to be sufficiently complete to add a distinct reason for redistribution over and above the positive duties of assistance that other theories might support as a matter of benevolence or humanity. This is because Pogge’s aim is to show that radical inequality globally represents a violation of a stringent negative duty.³⁷ To establish the violation of a negative duty requires showing that the agents bound by it are doing something they ought not do, and that what they are doing materially causes the deprivation in question. The approaches that appeal to ‘shared institutions’ and ‘common history’ both incorporate explanatory hypotheses of the requisite kind. The ‘uncompensated exclusion’ approach, however, consists purely in description - and

a description of a state of affairs which could be a result of the causes invoked by the explanatory approaches. At any rate, the description is not accompanied by any new explanatory hypothesis about how the advantages of the better-off come about or how the exclusion of the worse-off is effected. What Pogge characterises are the unjust *effects*: ‘The global poor get to share the burdens resulting from the degradation of our natural environment while having to watch helplessly as the affluent distribute the planet’s abundant natural wealth amongst themselves.’³⁸ The only hint of causality and agency comes at the end of his brief discussion: ‘the citizens and governments of the affluent states are therefore violating a negative duty of justice when they, in collaboration with the ruling elites of the poor countries, coercively exclude the poor from a proportional resource share.’³⁹ He does not suggest that the causality of coercive exclusion here is other than that posited by the shared institutions approach.

So I claim that Pogge’s complete moral argument for the justice of the GRD does not rest on a purer appeal to the undeserved character of natural resources than my own proposal does.

Nonetheless, perhaps Pogge’s strategy in proposing the GRD is intended not to require the complete moral argument - i.e. including the explanatory hypotheses - because the GRD is proposed as a modest rectificatory measure rather than an attempt to implement full distributive justice globally. The elements of arbitrariness which I have criticised it for could then be seen simply as confirmation that it is not a systematic argument for redistribution from rich to poor of the kind which needs to appeal to the explanatory approaches. The arbitrariness of territorial endowments might then just suffice. While I have doubts about this, as are explained elsewhere,⁴⁰ I shall let the matter rest here.

So the objection may be pressed against my own approach that this achieves a closer correlation between tax levels and wealth levels only by diluting the normative force derived from the correlation of the tax to undeserved natural assets.

However, my first response to this objection is to claim that on the contrary, as a matter of principle, by conceiving of natural resources as ecological space, the latter correlation is more perfectly maintained since *all* the use of natural resources - and not merely a one-off transaction involving (some of) them - is accounted for. So if an ecological space tax is anticipated to have a generally progressive effect among economically unequal nations the reason is that levels of ecological space usage tend to correlate empirically with levels of

economic wealth. The normative justification for levying the tax, however, relates not to the degree of wealth of a nation (as might indeed compromise the appeal to ‘undeserved’ natural assets) but to the degree of their excess use of ecological space. So the normative force at the level of basic principles is in no way diluted.

Nonetheless, it may still be objected that a tax which applies to *all* resource use, including all the various stages of production and consumption, may fail to distinguish in its impact between the value attributable to natural resource inputs (‘undeserved’ and thus liable for redistribution) and the value added through labour and technology (‘deserved’ and thus not liable for redistribution). This might be a real concern if separate products or producers were to be taxed. However, that is not envisaged. My proposal, like Pogge’s, envisages that the tax would be levied on nations. Unlike the GRD, though, which targets specific resources, a tax on aggregate ecological space use would leave national governments with the discretion to decide exactly how to raise the revenue. I see no objection to nations making fiscal arrangements that support some ecologically costly enterprises, provided that they make up for the ecological deficit in other sectors, making domestic ecological subsidies across sectors or firms as they see fit.

A version of the objection, however, might still be held to apply even when nations are recognized to be the relevant units of assessment. Imagine this scenario: Nation A is richer per capita than Nation B; Nation A is more resource efficient than Nation B; Nation A also uses more resources per capita than either Nation B or its own just allowance. How, then, do we know how much of Nation A’s wealth comes from resource efficiency and how much from resource overuse? My answer is that ‘we’ (thinking as theorists of justice) do not need to (even if a national government will have good reason to work it out in order to know how best to raise the revenue it owes). All ‘we’ need to know is that Nation A is in ‘ecological debt’⁴¹ due to its overuse. And how do we know how much that debt should be taken to amount to in economic terms? An illustrative, broadbrush, answer is: divide the global wealth by world population; divide global ecospace by world population; thereby arrive at a monetary equivalent for units of ecological space.⁴² But I anticipate the rejoinder: suppose Nation A is more efficient in its use of ecological space than are other nations; were it not for that efficiency, the aggregate global economic value of global ecological space would be less; therefore, as a consequence of its efficiency, Nation A has to pay more than if it had been inefficient, and this runs counter to justice. A response might be to adopt this principle:

calculate total ecological space utilised by all nations except Nation A; calculate all wealth except that of Nation A; then tax Nation A according to the resultant economic value of ecological space. I would not wish to lose sight, however, of the fact that the real remedy ultimately aimed at is to let all nations which overuse ecological space reduce their usage to the permitted amount- so then they would be able to retain the benefits deriving purely from efficient use of it.

So I would affirm that the requirement of sensitivity to the demands of desert can in fact be met for my proposal. The economic benefits derived from one's equal ecological space entitlement can be considered 'deserved'; gains derived from the utilisation of an excess amount of ecological space cannot be considered deserved, whatever ingenuity or industriousness was applied in yielding them. Unless, that is, an entitlement to more than one's equal share can itself be shown to be deserved: but an argument showing that would rest not on an appeal to the undeserved status of natural assets but on its denial.

4. Conclusion

In view of the criticisms of arbitrariness that can reasonably be levelled at the GRD proposal, I conclude by affirming four reasons to favour instead levying a tax proportional to a nation's ecological footprint. First, it relates to the use of all resources, not just a small selection. Secondly, it relates to the use of resources at each stage of their use, rather than just at the stage of their first extraction. In both of these respects an ecological space tax would be less arbitrary in its incidence than the GRD. Thirdly, ecological footprint accounts factor in all environmental effects of resource utilisation rather than the partial and marginal environmental effects of the GRD. Fourthly, an ecological space tax, because it tracks the use of natural resources even as they are valorised in the economic process, falls proportionately on the rich rather than the poor, which is something the GRD is not certain to do.

¹ An early formulation of the proposal appeared in Thomas Pogge, 'An Egalitarian Law of Peoples', *Philosophy and Public Affairs* 23.3 (1994), pp.195-224. While I shall sometimes refer to this for the background it gives to Pogge's thinking, I shall for the most part refer to the more recent formulation to be found in chapter 8 of Thomas Pogge, *World Poverty and Human Rights* (Cambridge: Polity Press, 2002).

² Pogge, *World Poverty and Human Rights*, p.196.

³ Pogge, *World Poverty and Human Rights*, pp.196-7.

⁴ Pogge, *World Poverty and Human Rights*, p.205.

⁵ Pogge, *World Poverty and Human Rights*, p.198.

⁶ On the question of whether each of the three sets of conditions is in fact a distinct cause of radical inequality see section 4 below.

⁷ Pogge, *World Poverty and Human Rights*, p.204.

⁸ Joseph Heath, 'Rawls on Global Distributive Justice: A Defence', online version <http://www.chass.utoronto.ca/~jheath/rawls.pdf>, p.20. The article is forthcoming in Daniel Weinstock (ed) *Canadian Journal of Philosophy* Supplementary Volume 29 (Lethbridge: University of Calgary Press).

⁹ Pogge, 'An Egalitarian Law of Peoples', p.200.

¹⁰ Dirk Haubrich, 'Global Distributive Justice and the Taxation of Natural Resources: Who Should Pick Up the Tab?', *Contemporary Political Theory* 3 (2004), pp.48-69.

¹¹ Pogge, 'An Egalitarian Law of Peoples', p.203.

¹² Pogge, *World Poverty and Human Rights*, p.206.

¹³ Heath, 'Rawls on Global Distributive Justice', p.20.

¹⁴ Pogge, 'An Egalitarian Law of Peoples', p.204; p.223.

¹⁵ A fuller criticism on this point is provided by Roger Crisp and Dale Jamieson, 'Egalitarianism and a Global Resources Tax', in V.Davion and C.Wolf (eds.), *The Idea of a Political Liberalism* (Lanham: Rowman and Littlefield, 2000) at pp.99-101.

¹⁶ This is not to deny that the GRD could achieve the end of poverty reduction through the redistribution of the funds it raises, but the same would be true of funds raised by other methods which are not vulnerable to criticisms of their effects on the revenue-raising side.

¹⁷ Pogge, *World Poverty and Human Rights*, p.197.

¹⁸ This perspective is grounded in the seminal work of ecological economist Nicholas Georgescu-Roegen, *Energy and Economic Myths* (New York: Pergamon Press, 1976). It is probably worth stressing that this perspective keeps biophysical accounts of resource throughputs quite distinct from monetary accounts and it thereby differs from those schools of *environmental* economics which seek to establish market or shadow market prices for environmental goods and services.

¹⁹ Mathis Wackernagel and William Rees, *Our Ecological Footprint* (Philadelphia: New Society, 1996).

²⁰ See e.g. Jason Venetoulis, Dahlia Chazan, and Christopher Gaudet, *Ecological Footprint of Nations*, (Redefining Progress, 2004): www.RedefiningProgress.org.

²¹ This is a mistake also found in Charles Beitz, *Political Theory and International Relations* (Princeton: Princeton University Press, 1979): see Tim Hayward, 'Global Justice and the

Distribution of Natural Resources', www.psa.ac.uk/2005/pps/Hayward1.pdf. That it is a mistake is widely recognised: see e.g. Heath, 'Rawls on Global Distributive Justice'; Haubrich, 'Global Distributive Justice and the Taxation of Natural Resources'; and Mathias Risse, 'What We Owe to the Global Poor', *The Journal of Ethics*, 9.1-2 (2005), pp.81-117.

²² Pogge, 'An Egalitarian Law of Peoples', p.201.

²³ Pogge, 'An Egalitarian Law of Peoples', p.201.

²⁴ Pogge, 'An Egalitarian Law of Peoples', p.201.

²⁵ On this score, there is a similarity between my approach and that of Hillel Steiner, 'Just Taxation and International Redistribution', *Nomos*, 39 (1999), pp.171-191. But for differences between them see note 42 below.

²⁶ Pogge has put it to me (personal communication) that his GRD would be similar in its effects to an ecological footprint charge inasmuch as it would apply differentially to different resources depending on how damaging their use is. Nonetheless, while appreciating the common spirit of the two proposals, I continue to maintain that a tax based on a nation's aggregate excess usage of ecological space does differ in significant respects from a set of taxes levied on discrete resources at the point of their extraction.

²⁷ 'Radical inequality' is a concept with a specific meaning for Pogge which he details in *World Poverty and Human Rights*, p.198.

²⁸ Pogge, *World Poverty and Human Rights*, p.205.

²⁹ Pogge, *World Poverty and Human Rights*, p.205.

³⁰ Alf Hornborg, *The Power of the Machine: Global Inequalities of Economy, Technology, and Environment* (Walnut Creek, CA: Altamira Press, 2001), p.33.

³¹ Alf Hornborg, 'The Unequal Exchange of Time and Space: Toward a Non-Normative Ecological Theory of Exploitation', *Journal of Ecological Anthropology*, 7 (2003), pp.4-10: p.6.

³² Pogge, *World Poverty and Human Rights*, p.202.

³³ This idea is explicitly drawn on by Beitz, *Political Theory and International Relations*, but for critical reservations about it see Hayward 'Global Justice and the Distribution of Natural Resources'.

³⁴ I am granting *arguendo* that the un/deserved distinction carries some moral weight in an intuitive and general way, not endorsing any more specific idea of desert as a primary substantive criterion of justice- for criticisms of which see e.g. John Rawls, *A Theory of Justice* (Oxford: Oxford University Press, 1972). It would take me too far from the present topic to enter debate about the presupposition I am simply allowing here, but some challenging questions about it are raised by Elizabeth Anderson, 'What is the Point of Equality', *Ethics* 109.2 (1999), pp.287-337.

³⁵ Pogge, *World Poverty and Human Rights*, p.199.

³⁶ Pogge, *World Poverty and Human Rights*, p.203.

³⁷ Pogge, *World Poverty and Human Rights*, p.198.

³⁸ Pogge, *World Poverty and Human Rights*, p.203.

³⁹ Pogge, *World Poverty and Human Rights*, p.203.

⁴⁰ Hayward, 'Global Justice and the Distribution of Natural Resources'

⁴¹ For more on this concept and its applicability see the report by Erik Paredis et al, 'Elaboration of the Concept of Ecological Debt' (Centre for Sustainable Development, Ghent University, 2004), http://cdonet.ugent.be/english/north-south/research/ecological_debt/index.html

⁴² This very general principle may be contrasted with that proposed by Steiner, 'Just Taxation and International Redistribution'. For while his proposal would similarly direct a tax at the value of natural resources calculated on the basis of their aggregate global value with the aim of redistributing it equally, his conception of natural resources differs in taking these to be 'compactly describable as constituting a set of *territorial sites*.' As I discuss more fully in Hayward, 'Global Justice and the Distribution of Natural Resources', one of the problems with this approach is that territorial sites do not comprise all and only natural resources. Yet even aside from that problem, a further disadvantage of Steiner's approach shows in the comparison he draws with Pogge's regarding the tax base to be used: 'on Pogge's account, that base is the aggregate value of only *used* resources, with only some *proportion* of that value to be taxed. Whereas for the Global Fund... that base is the aggregate value of owned resources - whether used or not - with that value to be taxed at a rate of 100%.' But imposing a 100% levy - or indeed any levy at all - on the value of natural resources possessed, regardless of whether they are used or not, acts as a strong incentive to exploit rather than conserve resources. So given that I have criticised Pogge's proposal for being insufficiently systematic with regard to its secondary aim of promoting resource conservation, I would *a fortiori* criticise Steiner for advancing a proposal that systematically militates against that end.